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(54) **Implementing and managing state transitions for high-speed downlink packet access**

(57) A method of implementing a state transition from a first state to a second state for a wireless transmit receive unit, WTRU, the method comprising monitoring whether a state transition condition for the WTRU has occurred; checking whether the second state supports high speed downlink shared channel, HS-DSCH, reception, on condition that the state transition condition has occurred; releasing HS-DSCH resources on the condition that the second state does not support HS-DSCH reception. In another embodiment, a method of managing a state transition for a wireless transmit receive unit, WTRU, the method comprising setting a single HS-DSCH_RECEPTION_GENERAL variable indicating a status of high speed downlink shared channel, HS-DSCH, reception for any of the states Cell_FACH, Cell_PCH, URA_PCH and Cell_DCH; and when the HS-DSCH_RECEPTION_GENERAL is set to FALSE, stopping HS-DSCH reception, clearing radio network temporary identifiers, RNTIs, resetting a medium access control, MAC, entity, releasing all hybrid automated response request HARQ resources, and clearing any stored information elements related to HARQ information.

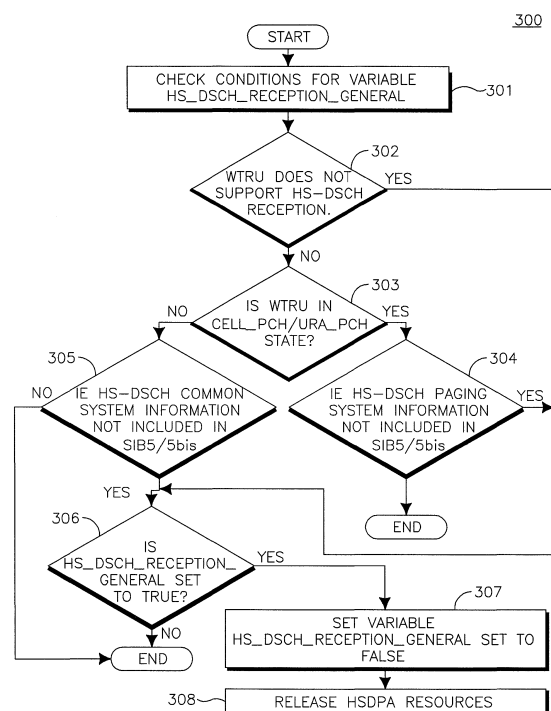


FIG.3

**PARTIAL EUROPEAN SEARCH REPORT**

Application Number

under Rule 62a and/or 63 of the European Patent Convention.
This report shall be considered, for the purposes of
subsequent proceedings, as the European search report

EP 13 17 3681

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
E	EP 1 973 364 A (INNOVATIVE SONIC LTD [VG]) 24 September 2008 (2008-09-24) * paragraph [0004] - paragraph [0010] * * paragraph [0013] - paragraph [0014] * * paragraph [0022] - paragraph [0025] * * figure 3 *	1-5,8-12	INV. H04W36/00
A	----- NOKIA ET AL: "Introduction of Enhanced CELL_FACH state", 3GPP DRAFT; R2-071012 ENHANCED CELL_FACH 25331-730 CR V04, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, vol. RAN WG2, no. St. Louis, USA; 20070220, 20 February 2007 (2007-02-20), XP050134005, [retrieved on 2007-02-20] * Sections 8.5.25 and 8.5.yy * ----- -/--	1-5,8-12	TECHNICAL FIELDS SEARCHED (IPC) H04Q

INCOMPLETE SEARCH

The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out.

Claims searched completely :

Claims searched incompletely :

Claims not searched :

Reason for the limitation of the search:

see sheet C

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EPO FORM 1503 03.82 (P04E07)

Place of search	Date of completion of the search	Examiner
Munich	9 July 2014	Moreno-Solana, S
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document		



PARTIAL EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
A	"Universal Mobile Telecommunications System (UMTS); High Speed Downlink Packet Access (HSDPA); Overall description; Stage 2 (3GPP TS 25.308 version 7.2.0 Release 7); ETSI TS 125 308", ETSI STANDARDS, LIS, SOPHIA ANTIPOLIS CEDEX, FRANCE, vol. 3-R2, no. V7.2.0, 1 March 2007 (2007-03-01), XP014037909, ISSN: 0000-0001 * Sections 14 and 15 *	1-5,8-12	
A	INTERDIGITAL: "Tdoc R2-071186: Mobility and Interworking between R6 and R7, document for Discussion on 3GPP TSG-RAN WG2#57bis", 3GPP TSG-RAN WG2 MEETING #57BIS, ST. JULIAN S, MALTA , no. TDOC R2-071186 26 March 2007 (2007-03-26), pages 1-3, XP002512045, Retrieved from the Internet: URL: http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_57bis/Documents/ [retrieved on 2009-01-26] * the whole document *	1-5,8-12	TECHNICAL FIELDS SEARCHED (IPC)
A	EP 1 694 011 A1 (NEC CORP [JP]) 23 August 2006 (2006-08-23) * paragraph [0014] *	1-5,8-12	

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EPO FORM 1503 03.82 (P04C10)



INCOMPLETE SEARCH SHEET C

Application Number

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Claim(s) completely searchable:
1-5, 8-12

Claim(s) not searched:
6, 7, 13, 14

Reason for the limitation of the search:

The subject-matter of the claims contravenes the requirements of Art. 123(2) EPC to such an extent that comprises substantial non-allowable amendments, see accompanying communication. Therefore, a meaningful search of the subject-matter of the claims currently on file is not practicable, see Guidelines B-VIII, 6.

Nevertheless, following the indications of the Applicant, and taking into account how the description defines what appears to be the intended "invention", in an effort to provide the Applicant with a search under the circumstances (see Guidelines B-VIII, 6), a combination of features that appears to represent the "invention" has been looked for in the description.

In this respect, it appears that, regarding the second embodiment indicated above and disclosed in paragraphs 0037-0039 of the application as filed, a claim comprising the following combination of features would be supported by the present application as filed, Article 123(2) EPC:

- (i) A method for transitioning a wireless transmit receive unit, WTRU from a first state to a second state, wherein a state transition from a first state to a second state is a transition from Cell_FACH to Cell_PCH or URA_PCH ;
- (ii) explicitly checking an HS_DSCH_RECEPTION_cell_FACH_state variable when the WTRU receives any RRC message that causes a transition from Cell_FACH to Cell_PCH or URA_PCH;
- (iii) determining whether or not the state to which the WTRU transitioned supports HSDSPA; and
- (iv) releasing HSDPA resources if the second state does not support HSDPA .

It should also be noted that since the claims as currently on file are formally not unitary, Article 82 EPC, see comments on the accompanying communication, following further the indications of the Applicant, and taking into account the severity of the objections as to lack of support set out above regarding claims 6, 7, 13 and 14, the subject of the search was restricted to the combination of features (i) to (iv), which means that the subject-matter of claims 6, 7, 13 and 14 has not been searched.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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09-07-2014

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EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82